

bol about their dams. Ah this is all beautiful—very beautiful and true!

Again it is dark and hushed for a time. Behold yon bright ball of fire arising in the east, just over the tops of the shadowy elms and pines! How mellow, calm, gentle, and modest is its appearance, yet how glorious! That is the moon—a satellite of the earth. It is as still as the grave-yard, or the vast desert, yet it is probably peopled with creatures like this world. I hear the song of the whippoorwill upon the neighbouring hill. The thrush utters a few of his notes; they are praising the gentle moon. See how gracefully she rides like an Eastern Queen, beneath the stars, through the blue heavens!! I turn my eyes from her above, east, west, north and south, and behold a universe having no bounds, sparkling with thousands of millions of worlds, greater than the moon and brighter than the sun. Oh how lovely and yet how grand! These are the creatures of one Almighty Spirit!

GEOLOGY.

There is no science more interesting than Geology, unless it be astronomy. By it we learn the changes that have taken place on the face of our country and the globe for thousands of years past. The facts disclosed by it cannot lie. They are as plain as the grandeur of the Heavens. When we see a country overspread with round pebbles and vast boulders. When we see hillocks of sea shells many miles inland. When we see the marks of the action of water upon land which has been buried for ages many feet below the top soil, or hills thrown up into peaks on vast inland plains, and these hills composed of small round stones; we cannot reasonably question, that at some distant period, the face of the country having these appearances, was inundated by deep water. Again when we go below the solid rocks called secondary, or tertiary, hundreds of feet below the present soil, the remains of beasts, birds, fishes, and plants now extinct, and even their foot prints are found, evidencing that many thousands of years ago, the world was in a different state from what it now is. These antiquities cannot lie, for they appear as they were left by nature, and where they would remain for thousands of ages to come, if untouched. The bones of vast reptiles are thus found. The bones of animals natural now only in torrid regions, have been found in Britain and in Europe, buried deep beneath the soil. Thousands of square miles of coal the remains of immense plants, trees, and cellular reeds, are found hundreds of feet below the soil, and under the hardest rocks in Europe and the United States; indicating a time on the earth when vegetation was much more luxuriant and gigantic than now. These vast beds of coal in which with a powerful microscope the remains of plants and reeds are plainly discoverable, and even the shapes of the leaves, now supply us and will supply our posterity a thousand years hence with fuel. By the study of this science we

learn the composition of the diamond—the metals—the salts—the rocks—the crystals, and the earth that covers our fields. We learn from it that vast islands in the ocean have been raised in the course of ages by the growth and decay of small sea animals in small shells, upon which islands and nations have afterwards flourished and now dwell, and which are covered with green fields and verdure. It teaches us from examination that the mighty Niagara Falls, have worn their way many miles, and that the sea once washed Queenston Heights. By it the numerous overflowings of the Nile in Egypt and of the Tigris have been counted. Such are some of the results of the study of this science. We intend in a future number to show the evidences of great changes on the face of the earth in Canada.

TORONTO MECHANICS' INSTITUTE.

Among the many institutions established within the last twenty-five years in Canada and in other parts of America as well as in Great Britain, none have done more good than Institutes for mechanics. They are designed to improve the minds of a class of men every day getting more numerous and respectable in this and other countries. The means used to improve themselves are threefold. First by the use of a good library from which they can draw books, and by reading periodicals. Secondly by hearing useful lectures delivered semi-weekly or weekly by learned men on various subjects. Thirdly by classes formed to debate, discuss, and instruct each other in the arts and sciences and general knowledge. Every mechanic has an interest in the advancement of such associations, and is well rewarded by paying the small sum necessary to become a member. In times past ignorance and labor were convertible terms. To labor was deemed derogatory to a learned man. Time has changed this notion greatly, and the prejudice is fast wearing off. Now mechanics can be found in Britain and America learned in all the knowledge of the times, being at once gentlemen philosophers and laborers. Thousands of them can be seen amongst us fit to move in any society. The term "ignorant" as applied to mechanics is out of date. They are as intelligent as any class in society, and as comfortable too. Mechanics Institutes, libraries and newspapers have been their best friends. To them in a great measure, they owe their present respectable position. That they may continue to prosper and grow more wise and learned is our desire. The great object of all men should be, to equalize the human family in knowledge, property, and political rights. Let there be no monopoly of knowledge. Let every human creature drink in the truths of science, and know and understand the mysteries of nature and the wisdom of God as displayed in the universe. The time was in our recollection in Canada, when no such institutions existed amongst us. The time was in our recollection, when mechanics were not as much respected as they now are. Within twenty-five years a wonderful change has been effected in this numerous class of society for the better. The Toronto Mechanics' Institute

was established in 1830 and incorporated in 1847. The total number of members is now 314. Volumes in Library, 1470; Reviews, Magazines and Newspapers taken in Reading Room, 39; Members taking Books out of the Library, 197; Lectures delivered weekly during the winter months—and Classes established for the instruction of the Members. Annual Subscription for ordinary Members, 7s. 6d.; Entrance fee, 2s. 6d. Junior Members, 5s.; Entrance fee, 1s. 3d. Subscription of £10 either in money, Books, or Apparatus, entitles to a Life-Membership.

The Hall at present occupied by the Institute, was erected by them in 1845, at a cost of upwards of £500. It is situated in rear of the Court-house fronting Adelaide-street. The following is a list, of most of the Books and Papers, and a short account published in January last, as taken from the yearly report. Since then some additions have been made to the Books and Papers, as specified above.

"The number of issues of books during the three months ending Dec. 23, 1850, was 730, classified thus;—Philosophy, Science, Arts, 112; History, Biography, Travels, &c., 420; Fiction, 193. The average nightly attendance of members at the Reading Room, during the last three months, was about 15. The Reviews, Magazines, and Newspapers, regularly received are the following:—London Quarterly Review, Edinburgh do., Westminster do., North British do., London Eclectic Review, Blackwood's Magazine, Chambers' Edinburgh Journal, London Art Journal, London Artizan, American Journal of Science, Harper's Monthly Magazine, Montreal Literary Garland, Upper Canada Jurist, Upper Canada Journal of Education, Canadian Agriculturist; London Builder, Observer, Illustrated News, and British Banner; New York Courier and Enquirer, Farmer and Mechanic, and Albion; Montreal Transcript; Kingston Herald; Toronto British Colonist, Globe, Daily Patriot, Examiner, Church, Guardian, Watchman, and North American, and others."

Mental Culture.

It is at once melancholy and fearful to reflect how much intellect is daily perishing from inaction; or worse than perishing from the false direction given it in the morning of life. I fear we do not fully realise what is meant when we speak of the improvement of the mind. I fear it is not yet enough considered by legislators or parents, that there dwells in every rational being an intellect, endowed with a portion of the faculties which from the glory and happiness of our nature, and which, developed and exerted, are the source of all that makes man to differ essentially from the clod of the valley. Neglected and uncultivated, deprived of its nourishment, denied the discipline which is necessary to its healthful growth, this divine principle all but expires, and the man whom it was sent to enlighten, sinks down before this natural death, to his kindred dust. Trained and instructed, strengthened by wise discipline, and guided by pure principles, it ripens into an intelligence little lower than the angels. This is the work of education. The early years of life are the period when it must commonly be obtained; and if this opportunity is lost, it is too often a loss which nothing can repair. It would be more rational to talk about not affording seed corn than to talk about not affording our children as much of their time as is necessary for their education. What! shall a man plant his field and allow his child's intellect to run to weeds? And to confine them in the morning of their days to a round of labor that perisheth, is it not when our children ask for bread to give them a stone; when they ask for a fish to give them a serpent which will sting our bosom as well as theirs?

HON. EDWARD EVERETT.